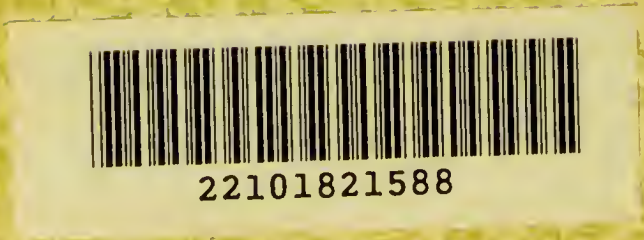
The Salisbury Treatment of Disease

BAILLIÈRE TINDALL & COX

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BRIEF STATEMENT

OF THE SO-CALLED

'SALISBURY PLANS'

OF TREATING—BY ALIMENTATION—

THE VARIOUS DISEASES PRODUCED BY UNHEALTHY AND INDISCREET FEEDING.

BY

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LONDON:
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INTRODUCTION.

THE principal or most ordinary diseases produced by unhealthy feeding are *Obesity*, *Rheumatism*, and the so-called *Rheumatic Gout*, the various forms of the *gravelly diathesis; uterine fibroids*, and *fibrous tumours* generally; *ovarian* (muco-fibrous) *tumours*, *goitre*, *locomotor ataxy*, and all *sclerotic conditions* and *excessive developments* of either the *connective* or *fatty tissues*, wherever they may occur, where such developments do not *normally belong; Bright's disease*, *diabetes*, *consumption*, both *tubercular and fibrous*, and both *vegetable* and *meat dyspepsia*, and their *outcomes*.

A work is now in the press, embracing the extended series of experiments in feeding upon one kind of food at a time to develop or determine the diseased states that each food produces when lived upon exclusively and continuously.

These experiments were performed upon healthy men, and finally upon animals, in order to carry the diseased conditions on to death, which could not be done in the human being. They extended through many years, and resulted in determining the

important fact that all diseases, apart from injuries and infections, have their genesis and development in something we are doing daily or habitually that we ought not to do ; and that this wrong-doing is mainly in the direction of indiscreet and unhealthy alimentation.

By structure we are about two-thirds carnivorous and one-third herbivorous. This shows that, if we would keep well, maintain healthy bodies and minds, and live long, we must feed according to our structure, and take about two-thirds lean meat food and one-third vegetable.

Pure water makes up about 75 per cent. of our weight, and is an important food. If we should leave off water, and live exclusively upon desiccated foods, we should survive but a very short time; while on pure water alone life would be prolonged to from forty to sixty days. It is also a valuable agent for cleanliness—to wash with, inside and out. Cleanliness is all-important in maintaining healthy actions and conditions. When we use it for washing, we should take it about one and a half hours before each meal, and half an hour before retiring. This gives time for it to get out of the stomach before food enters, and before sleeping.

We should never eat on a tired stomach, but should, if fatigued, rest previous to eating, and always remain passive and quiet awhile after eating ; at least, we should not engage in any considerable exertion, either

physical or mental, till the food begins to digest and pass out of the stomach.

The more thoroughly we can make all our labours and happenings in life recreations and enjoyable efforts, the more perfectly we shall digest and assimilate the foods eaten, and the more perfect will be the health of body and mind. Much of the wear and tear and expenditure of vitality would then be avoided, and the present and ordinary useless waste saved to prolong our lives, and enable us to enjoy advanced age in healthy and hospitable bodies.

There is no reason why we should not live—laying aside accidents—to reach, with clear heads and healthy bodies, a hundred and more years.

When we consider the great amount of vitality thrown away in useless and wrong mental and physical efforts, we need not wonder at the shortness and uncertainty of life.

9, WEST 29TH STREET, NEW YORK,
October 30th, 1886.

THE 'SALISBURY PLANS.'

Drinks, Food, Exercise, Bathing, and Treatment for Obesity.

Drinks.—Drink a pint of hot water at about 110° Fahr., one and a half to two hours before each meal and half an hour before retiring. From five to fifteen minutes should be taken for drinking the water, so as not to distend the stomach to an uncomfortable degree. The object of the hot water is to wash from the stomach the slimy mucus, alcoholic and sour yeasts, and bile, before eating and sleeping. The water should be drunk long enough before each meal to allow it time to get out of the stomach before the food enters. When thirsty, between two hours after a meal and one hour before the next, drink hot water, clear tea, lemon-water, or crust coffee. Take no other drinks of any kind between meals. At meals, drink one cup (five to eight ounces) of clear tea or clear coffee.

The best times for taking the hot water are at about 6 a.m., 11 a.m., 4 p.m., and 9 p.m., and the meals at 7.30 to 8 a.m., 12.30 to 1 p.m., and 5.30 to 6 p.m.

It is better to take the hot water in the morning in bed ; or if up, to lie down for a while after taking it.

Food.—The food should be either the muscle pulp of beef, broiled, broiled beefsteak free from fat, roast beef, broiled lamb or mutton, and roast lamb or mutton. For side dishes—oysters, raw, broiled or roasted in the shell; broiled or boiled fish; chicken, game and turkey, broiled or roasted. All fat should be avoided, except a little butter. Salt and pepper and Worcestershire, Chutney, or Halford sauce may be moderately indulged in with the meats.

All meats eaten should be fairly well cooked. Very rare meats are harder to digest; the muscular fibres passing through the bowels often undigested. Celery is admissible.

Avoid all other foods and condiments. By persisting in this plan of alimentation the adipose tissue will rapidly disappear, and the loss in weight will be from ten to thirty pounds per month, according to the degree of fatness, the rigidity of diet, and the exercise and mental condition of the patient.

If the loss of weight becomes too rapid and the shrinkage in bulk so fast that the skin does not keep pace with it, and begins to hang in folds and wrinkles, a little of the fat-forming foods, such as bread, toast, rice, cracked wheat, and potatoes may be used. Usually a shrinkage of from ten to fifteen pounds a month is about right.

When the desired weight and bulk is reached, increase the proportion of fat-forming food just sufficient to maintain the bulk and weight of the body as desired. Usually two parts of meat and one part of vegetable food, by bulk, will be about right. Often, however, this proportion may be varied either way under the guidance of good judgment.

MEALS.—The meals should be taken at regular intervals, and it is better to eat alone, or only with those who are living on the same diet. All temptation should, as much as possible, be removed from the patient. If three meals a day are not sufficient to satisfy hunger, the patient may be allowed a nice piece of broiled steak between breakfast and dinner, and dinner and supper. These extra meals should be taken at fixed and regular intervals.

If care is taken in following out this plan of diet, it will not be long before the system gets in good order, the digestion and assimilation will go on nicely, and the patient will eat largely and with great relish. You will often be assured by the patient that there is no food so nice as a good cake of well-broiled muscle pulp of beef. The appetite becomes so good, and the relish for the beef is so great, that you need not be surprised to see from one to two pounds eaten at each meal. The patient should be cautioned to never eat on a tired stomach. Rest one hour before and after each meal; eat slowly, and masticate the food well.

BATHS.—Take a soap and hot-water bath twice a week, for cleanliness, after which oil all over, and rub well from the head towards the feet. Oil with a mixture of equal parts of pure glycerine and water. Every night or day sponge all over with hot water, in which put two or three teaspoonfuls of aqua ammonia to the quart of water; rub in well and wipe dry.

EXERCISE.—Either walk or ride daily as much as possible without producing fatigue. If not able to walk or ride, the body and limbs should be rubbed well from the head towards the feet, for ten to twenty minutes, morning, noon and night, by some one who has strength

to do it passively, thoroughly and well, without exciting the patient.

CLOTHING.—Wear flannel or silk next to the skin, and dress comfortably warm. On retiring, change all clothing worn during the day, so that it may be thoroughly aired for the following morning. Keep the clothing sweet and clean by changing often. The bed should be thrown open on rising, and the bedding well aired during the day, and should not be made up till the patient wishes to retire. Good ventilation is very essential.

MEDICAL TREATMENT.—Remember that the medicines cure nothing; they only aid in keeping the human machine in good running order, while the cure is effected by the careful and rigid alimentation, avoiding as much as possible all fat-forming elements.

Good bracing tonics may often be used with advantage before meals to stimulate the digestive organs, and pepsin and pancreatine, taken during or after meals, may, under the proper conditions, help, so far as they assist in promoting good digestion and assimilation.

The great aim should be to keep all parts of the system in the best and healthiest running order possible. The philosophy of this physiological work is to dispense with all foods, drinks and medicines that tend in any way whatever to the getting and keeping the histological elements, organs and tissues out of order, and to persistently and continually feed the tissues that need feeding, and starve those that need starving, till the normal balance in them is restored and the beautiful symmetry attained, which is always the certain and sure outcome of healthy alimentation.

Drinks, Food, Exercise, Bathing, Massage, and Medical Treatment in Rheumatism.

Drinks.—Drink from one to two pints of hot water (105° to 120° Fahr.) from one and a half to two hours before each meal and half an hour before retiring. From fifteen to thirty minutes should be taken for drinking this water, so as not to distend the stomach and make it feel uncomfortable.

The object of the hot water is to wash out a dirty, yeasty, slimy, sour stomach, before eating and sleeping, and to gradually cleanse the entire system, which is saturated with organic acids—the outcome of the long-continued action of the acid yeasts in the digestive organs upon the vegetables, breads, sweets, and fruits, which have been far too exclusively and too long used. This extreme acidity has resulted in a more or less ropiness, stringiness, and sticky, partially clotted condition of the blood, which renders it liable to hang and be impeded in its progress through the capillary vessels, in and around the joints, whenever the connective tissues of these parts are contracted by exposure to cold.

At each meal, one cup of clear tea or clear coffee may be taken. No other drinks allowed. The best times for taking the hot water are at about 6 a.m., 11 a.m., 4 p.m., and 9 p.m. And the best times for the regular meals, 8 a.m., 1 p.m., and 6 p.m.

Food.—The diet should be made up entirely of the muscle pulp of lean beef—made into cakes and broiled. The pulp should be as free as possible from connective or glue tissue, fat and cartilage. The 'American Chopper'

answers very well for separating the connective tissue; this being driven down in front of the knife to the bottom board. In chopping the beef, it should not be stirred up in the chopper, but the muscle pulp should be scraped off with a spoon at intervals during the chopping. At the end of the chopping, the fibrous tissue of the beef (the portion that makes up fibrous growths and thickenings) all lies on the bottom board of the chopper. This may be utilized as soup meat for healthy people. Previous to chopping, the fat, bone, tendons, and fascia should all be cut away, and the lean meat cut up in pieces an inch or two square. Steaks through the centre of the round are the richest and best for this purpose. Beef should be used from well-fatted animals that are from four to six years old. The pulp should not be pressed too firmly together before broiling, or it will be hard and livery after cooking. Simply press it sufficiently so that it will hold together. Make the cakes from half an inch to an inch thick. Broil slowly and moderately well over a fire free from blaze and smoke, turning often to save the juices. When cooked, put on a hot plate, and season to taste with butter, pepper, and salt. Either Worcestershire, Halford, or Chutney sauce may be used moderately if desired. A little celery is allowable at each meal.

Avoid all other foods and condiments till the fermentations in the stomach and bowels have ceased and all rheumatic pains disappeared. The amount of meat pulp eaten at each meal should be from two to eight ounces. At first begin with two ounces, and continue this amount till the stomach is clean and the urine as clear as an infant's, and the appetite strong for

the meat pulp. Then gradually increase to four ounces, and then to six ounces, and finally to eight. Eat slowly and masticate well.

After the rheumatic pains have ceased, and the flatulence and fermentations are disposed of, either bread, toast, boiled rice, or cracked wheat may be brought into the diet list, in small quantity. Only one of these at each meal should be allowed with the meat, and in quantity equal to about one-quarter the bulk of the meat eaten. As side-dishes, other meats, such as lamb, mutton, oysters, game, and chicken, may now be indulged in, in small quantity. If the rheumatic pains should at any time begin to return, it is necessary to restrain the pulp of beef, and persevere with it as before. Under this rigid regimen the improvement will be marked and rapid.

MASSAGE.—This is an important part of the successful handling of this disease. The painful and swollen parts should be handled gently, passively and soothingly at first, gradually increasing the pressure as the sensitiveness abates. This handling relieves the congestion and inflammation, promotes absorption, and give tone to the sensitive and weakened nerves.

This part of the treatment has nothing to do with the removal of the cause of the disease, but is simply a means of hastening the removal of local pains, congestions, and swellings, and in these respects it brings relief and comfort to the patient and shortens the road to a cure.

MEALS.—The meals should be taken at regular intervals, and it is better to eat alone or only with those who are living on the same diet. All temptation should, as much as possible, be removed from the

patient. If three meals a day are not sufficient to satisfy hunger, the patient may be allowed an ounce or two of beef pulp, broiled, between the morning and noon and the noon and night meals. These extra lunches should be made up of a few mouthfuls only, and be taken at fixed and regular intervals. Not enough is eaten to interfere with the regular times for taking the hot water.

If care is used in following out this plan of diet, it will not be long before the system gets in good order, the digestion and assimilation will go on nicely, the urine will flow freely and become as clear as an infant's, the stomach will get clean and sweet, the perspiration free from acidity, the pains and swellings will begin to disappear and the patient will begin to take on the good feelings and the glow of healthy states, and eat the pulp of beef with a great relish.

Food should never be taken on a tired stomach. Always rest an hour before and after each meal. Eat slowly and masticate the food well.

Exercise.—During the acute stage the exercise should be passive only, and communicated by rubbing and handling. Later on, driving out daily, when the weather is suitable, may be indulged in, and moderate walking when it can be done without giving pain or producing fatigue.

Baths.—In this disease the ablutions for cleanliness and the baths for elimination should be given with care and judgment, or the pains, congestions and inflammation may be increased by them. They should be given as warm as can be borne, to promote perspiration and elimination, after which the body and limbs should be well and briskly rubbed dry between

flannel sheets. The ablutions should be performed quickly; the water should be at least 115° to 120° Fahr., and should contain either ammonia or soda, as much as can be borne without irritating the skin.

Hot earth and sand baths are most valuable in promoting rapid elimination through the glands of the skin. The temperature of these baths should be about 115° Fahr., and the entire body and limbs (except the head) should be completely enveloped. After these baths the surfaces should be quickly rinsed off in an ammonia and hot water bath, and then thoroughly dried between flannel sheets.

Clothing.—Wear flannel next the skin night and day. On retiring, change all clothing worn during the day, so that it may be thoroughly aired. Keep the clothing sweet and clean by changing often. The sour eliminations from the skin, especially during the acute stage, saturate the clothing quickly. During this stage the bedding should be changed morning and evening. When this stage is passed and the patient can sit up, the bed should be thrown open on rising, and the bedding well aired during the day, and should not be made up till the patient wishes to retire. Good ventilation is very essential.

Medical Treatment.—Remember that the medicines cure nothing—they only aid in keeping the machine in good running order, while the cure is effected by the careful and rigid alimentation, freed as much as possible from all fermenting and connective-tissue forming elements. Tincture of iodine and iodoform may often be brought in advantageously for local use, while the iodides and bromides of potassium, ammonium and sodium may be used internally to

stimulate action in the eliminating glandular organs and at the same time soothe the acute sensitiveness and promote repose and sleep.

Pepsin and pancreatine are indicated during and after meals, so far as they may assist in aiding digestion and assimilation. The great aim should be to keep all parts of the system in the best possible running order. The philosophy of this physiological work is to dispense with all foods, drinks and medicines that tend in any way whatever to the getting and keeping the histological elements, organs and tissues out of order; and to persistently and continually feed and starve tissue as long as any remnant of the disease remains—healthfully feeding those tissues that need nourishing, and starving those that have been over and unhealthfully fed.

It is not sufficient to look to weekly or monthly exposures for the cause, but to daily and hourly. In creating either healthy or diseased habits, the healthy or pathological act must be *regular*, *frequent*, and *long-continued*, in order to cause confirmed states of health or established conditions of disease. We must reach the underlying causes before we can cure. We may relieve and seemingly cure without knowing or removing causes, but such relieving and curing are not permanent.

We should remember that all these states and conditions we bring upon ourselves by something we are doing daily and persistently.

This wrong-doing must be stopped; then we may use with advantage any means that will help to gradually bring back and establish healthy states and habits in the diseased structures.

DRINKS, FOOD, EXERCISE, BATHING AND TREATMENT IN UTERINE FIBROIDS AND IN OTHER FIBROUS GROWTHS AND THICKENINGS; IN LOCOMOTOR ATAXY AND IN ALL SCLEROTIC STATES; OVARIAN TUMOURS, GOITRE, AND IN ALL EXCESSIVE DEVELOPMENTS IN CONNECTIVE OR GLUE TISSUE, WHEREVER THEY MAY OCCUR, WHERE SUCH DEVELOPMENTS DO NOT NORMALLY BELONG.

DRINKS.—Drink a pint of hot water, one to two hours before each meal and half an hour before retiring. From fifteen to thirty minutes should be taken for drinking this water, so as not to distend the stomach to make it feel uncomfortable. The object of the hot water is to wash out a dirty, yeasty, slimy, sour stomach before eating and sleeping. The water should be drunk long enough before each meal to allow it time to get out of the stomach before the food enters. When thirsty, between two hours after a meal and one hour before the next, drink hot water, clear tea, or crust coffee. Take no other drinks of any kind between meals. At meals drink one cup (eight ounces) of clear tea.

FOOD.—Eat the muscle pulp of lean beef made into cakes and nicely broiled. This pulp should be as free as possible from connective or glue tissue, fat, and cartilage. The 'AMERICAN CHOPPER' answers very well for separating the connective tissue: this being driven down in front of the knife on to the bottom board. In chopping the beef, it should not be stirred up in the chopper, but the muscle pulp should be

scraped off with a spoon at intervals during the chopping.

At the end of the chopping the fibrous tissue of the meat (the portion that makes up fibrous growths) all lies on the bottom board of the chopper. This may be utilized as soup meat for healthy people. Previous to chopping, the fat, bone, tendons and fasciæ should all be cut away, and the lean muscle cut up in pieces an inch or two square. Steaks through the centre of the round are the richest and best for this purpose. Beef should be used from well-fatted animals that are from four to six years old. The pulp should not be pressed too firmly together before broiling, or it will taste like liver. Simply press it sufficiently so that it will hold together. Make the cakes from half an inch to an inch thick. Broil slowly and moderately well over a fire free from blaze and smoke. When cooked, put it on a hot plate and season to taste, with butter, pepper and salt. Either Worcestershire, Halford or Chutney sauce may be used on meats, if desired. A little celery may be eaten at each meal.

Avoid all other foods and condiments. This rigid diet should be kept up till the fibrous growths have either mostly or entirely disappeared, when bread, toast, boiled rice and cracked wheat may be gradually brought into the diet list. Other meats may now begin to be taken, such as lamb, mutton, game, fish, and whole steaks. If the fibrous growths begin to increase again, return at once to the muscle pulp of beef, and continue it until all traces of the growth have disappeared. Then begin to bring in gradually, as before, other foods, moving along watchfully and carefully, keeping the stomach clean and the urine standing at 1·015 in

density, and the appetite good. It takes from one to three years' rigid work to remove fibrous diseases thoroughly and to break up all the diseased appetites, cravings and desires that have been at the bottom of the conspiracy in producing such grave pathological states. The patient will lose in weight, from the loss of fat and connective tissue, for the first few months. This, however, is a favourable indication, and need excite no uneasiness. After a while the gain in blood, muscle, bone and nerve will be greater than the shrinkage; when a gain in weight will take place. This gain will be slow, but it will be all the time advancing steadily in the direction towards a healthy state. The physician and patient must be both satisfied with the steady improvement, even if it is slow. It is the only way open to a perfect cure and to perfect health. Extirpating a growth never removes the cause and never results in a radical cure. The same old alimentation may develop still further and othre growths.

MEALS.—The meals should be taken at regular intervals, and it is better to eat alone, or only with those that are living on the same diet. All temptation should, as much as possible, be removed from the patient. If three meals a day are not sufficient to satisfy hunger, the patient may be allowed a nice piece of broiled steak between breakfast and dinner and dinner and supper. These extra meals should be taken at fixed and regular intervals.

If care is taken in following out this plan of diet, it will not be long before the system gets in good order, the digestion and assimilation will go on nicely, and the patient will eat largely and with great relish. You

will often be assured by the patient that there is no food so nice as a good cake of the well-broiled *muscle pulp* of beef. The appetite becomes so good, and the relish for the beef so great, that you need not be surprised to see from one to two pounds eaten at each meal. The patient should be cautioned never to eat on a tired stomach. Rest one hour before and after each meal; eat slowly, and masticate the food well.

BATHS.—Take a soap and hot water bath twice a week, for cleanliness; after which oil all over, and rub well from the head towards the feet. Every night or day sponge all over with hot water, in which put two or three teaspoonfuls of aqua ammonia to the quart of water; rub in well and wipe dry.

EXERCISE.—Ride daily as much as possible without producing fatigue. If not able to walk or ride, the body and limbs should be rubbed well, from the head towards the feet, for ten to twenty minutes, morning, noon and night, by some one who has strength to do it passively, thoroughly and well, without exciting the patient.

CLOTHING.—Wear flannel or silk next the skin, and dress comfortably warm. On retiring, change all clothing worn during the day, so that it may be thoroughly aired for the following morning. Keep the clothing sweet and clean by changing often. The bed should be thrown open on rising, and the bedding well aired during the day, and should not be made up till the patient wishes to retire. Good ventilation is very essential.

MEDICAL TREATMENT.—Remember that the medicines cure nothing; they only aid in keeping the

machine in good running order, while the cure is effected by the careful and rigid alimentation—an alimentation freed as much as possible from all paralyzing and connective-tissue forming elements. Tincture of iodine or iodoform may often be brought in advantageously for local application, while the iodides and bromides of potassium, ammonium and sodium may at times be used internally to stimulate action in the eliminating glandular organs. Good bracing tonics may often be used before meals to stimulate the digestive organs; and pepsine and pancreatine, taken during or after meals, may, under the proper conditions, help so far as they assist in aiding digestion and assimilation.

The great aim should be to keep all parts of the system in the most perfect running order that is possible. The philosophy of this physiological work is to dispense with all foods, drinks and medicines that tend in any way whatever to the getting and keeping the histological elements, organs and tissues out of order, and to persistently and continually feed and starve tissue as long as any remnant of the disease remains; healthfully feeding those tissues that need nourishing, and starving those that have been over and unhealthfully fed.

It is not sufficient to look to weekly or monthly exposures for the cause, but daily and hourly. In creating either healthy or diseased habits, the healthy or pathological acts must be *regular*, *frequent* and *long-continued*, in order to become confirmed states of health or established conditions of diseases. We must reach the underlying causes before we can cure. We may relieve and seemingly cure without knowing or

removing causes, but such relieving and curing is not permanent.

We should remember that all these states and conditions we bring upon ourselves by something we are doing daily and persistently.

This wrong-doing must be stopped; then we may use with advantage any means that will help to gradually bring back and establish healthy states and habits in the diseased structure.

The Drinks, Food, Baths, Exercise, and Clothing in Bright's Disease.

Drinks. — Drink from one-half to one pint of hot water one and a half hours before each meal, and on retiring. From fifteen to thirty minutes should be taken for drinking this water, so as not to distend the stomach to make it feel uncomfortable. The object of the hot water is to wash out a dirty, yeasty, slimy, sour stomach before eating and sleeping. The water should be drunk long enough before each meal to allow it time to leave the stomach before the food enters. Drink a cup (eight ounces) of clear tea or coffee, or beef-tea (made from beef freed from fat and connective tissue) at each meal. When thirsty, between two hours after a meal and one hour before the next, drink hot water, clear tea, or beef-tea freed from fat or gelatine. Take no other drinks of any kind. If the hot water sickens the stomach, sprinkle in a little salt, just enough to take off the flat taste.

Food.—Eat the muscle pulp of lean beef made into cakes and broiled. This pulp should be as free as possible from connective or glue tissue, fat, and cartilage. The 'American Chopper' answers very well for separating the connective tissue, this being driven down in front of the knife to the bottom board. In chopping the beef it should not be stirred up in the chopper, but the muscle pulp should be scraped off with a spoon at intervals during the chopping.

At the end of the chopping, the fibrous tissue of the meat (the portion that makes up fibrous growths) all lies on the bottom of the board of the chopper. This may be utilized as soup meat for healthy people. Previous to chopping, the fat, bone, tendons, and fascia should all be cut away, and the clean muscle cut up in pieces an inch or two square. Steaks through the centre of the round are the richest and best for this purpose. Beef should be used from well-fatted animals that are from four to six years old. The pulp should not be pressed too firmly together before broiling, or it will taste like liver. Simply press it sufficiently so that it will hold together. Make the cakes from half an inch to an inch thick. Broil slowly and moderately well over a fire free from blaze and smoke. For variety, use the steak (broiled) which is cut through the centre of a round of lamb or mutton, broiled quail, broiled oysters, broiled grouse, broiled woodcock, broiled snipe, broiled partridge, and broiled codfish. The whites of eggs may be taken raw, poached, or soft-boiled. Avoid all fats as far as possible, only using salt and pepper for seasoning. Mustard, mixed up with hot water and lemon-juice, or Worcestershire and Halford sauces,

may be used on meats if desired. A little celery may be eaten at dinner.

Avoid all pies, cakes, pickles, vinegar, soups, cheese, cream, milk, yolks of eggs, fat, sugar, crackers, bread, biscuit, beans, peas, nuts, fruits (except the juice of the lemon), vegetables, and all other food and condiments not previously mentioned. This rigid diet should be kept up till all traces of albumen and casts disappear from the urine.

When these have ceased to show themselves for a couple of weeks, the patient may be allowed one part of bread, toast, or boiled rice, BY BULK, to eight or ten of the beef. After continuing this departure for four weeks without the appearance of albumen or casts in urine, the bread, toast, or boiled rice may be increased to one part, BY BULK, to six parts of the meat, and a piece of butter the size of a hickory nut allowed for seasoning.

After continuing these proportions for four weeks, if still no signs of albumen or casts show themselves, the bread, toast, or rice may be increased to one part to five of the meat, with a little increase of the butter. Continue these proportions for one month. If no albumen or casts appear in the urine, increase the bread, toast, or boiled rice to one part to four of the meat, and continue this for a month longer. If all is well at the expiration of this time, give the succeeding month, one part of bread, toast, or boiled rice, to three of the meat, with a little increase of the butter. Continue these proportions for three months, and then, if no sign of the disease shows itself, increase the bread, toast, or boiled rice to one part, BY BULK, to two of the meat. Cracked wheat may now be brought in as a

change from the rice. After continuing this diet for a couple of months, if all goes well, and no signs of albumen or casts appear in the urine, milk, warm from the cow, two hours after breakfast and dinner, may be taken. The patient should go out to the cow and drink the milk as soon as it comes from the teat, with all its animal life and heat. Begin with half a pint, and gradually increase till the patient is taking a pint at a time. After continuing this system of alimentation for a couple of months, if the patient continues to thrive, and is advancing gradually toward health, a little fruit may be indulged in after dinner. This indulgence, however, must be carefully controlled, and the patient not allowed more than one peach, apple, orange, or bunch of grapes per day. Sugar and cream, also, may be very moderately indulged in, in tea and coffee.

This system of diet should be followed out for many months, and if no signs of the disease show themselves, it may be continued, gradually extending the diet list. It will be well, however, as a general rule, to continue to take two parts, BY BULK, of lean meat (broiled or roasted) to one of all other food.

If at any time during the treatment, after the albumen and casts have disappeared from the urine, they begin again to show themselves as the diet becomes more liberal, the patient should at once return to lean meat diet, as he did at the start, and proceed cautiously as before.

The patient will lose in weight during the early part of the treatment, but this need not excite anxiety, for after the first few weeks this loss will be checked, and a gradual gain will set in.

MEALS.—The meals should be taken at regular intervals, and it is better to eat alone, or with those living on the same diet. All temptations should, as much as possible, be removed from the patient. If three meals a day are not sufficient to satisfy hunger, the patient may be allowed a nice piece of broiled steak between breakfast and dinner, and between dinner and supper. These extra meals should be taken at fixed and regular intervals. If care is taken in following out this plan of diet, it will not be long before the system gets in good order, the digestion and assimilation will go on nicely, and the patient will eat largely and with great relish. You will often be assured by the patient that there is no food so nice as a good broiled steak, and he will surprise you by eating from one to two pounds at a meal. Never eat on a tired stomach. Rest one hour before and after each meal; eat slowly, and masticate the food well.

BATHS.—Take a soap and hot water bath twice a week for cleanliness; after which, rub with a coarse towel till the skin is red. Every night or day sponge all over with hot water, in which put a tablespoonful of aqua ammonia to the quart of water; rub in well, and afterwards wipe dry.

EXERCISE.—Ride daily in an easy carriage as much as possible without fatigue. If not able to walk or ride, the body and limbs should be rubbed, kneaded, and pounded all over for from ten to twenty minutes —morning, noon, and night—by some one who has the strength to do it thoroughly.

CLOTHING.—Wear flannel or silk next to the skin, and dress comfortably warm. On retiring, change all the clothing worn during the day, so that it may be

thoroughly aired for the following morning. Keep the clothing sweet and clean by changing every second or third day.

The bed should be thrown open on rising, and the bedding well aired during the day, and the bed not made up till the patient wishes to retire. Good ventilation is very essential. No tonics, mineral waters, or external applications should be used; the physician will give the remedies which are needed.

General Remarks.—Remember, the medicines cure nothing: they simply aid in keeping the machine in good running order, while the cure is effected by rigid alimentation—an alimentation freed as much as possible from all paralyzing and fat-forming elements. The constant and long-continued fermentation of vegetable food, fruits, and sweets in the stomach and bowels keeps the digestive organs all the time filled with carbonic acid gas. This, after a while, so paralyzes the cells of the surfaces with which it comes in contact, that they lose their normal selective power, and begin to take up, little by little, and more and more, carbonic acid gas, yeast, vinegar, etc., which are carried into the circulation, and thus reach every part of the organism.

The heart, liver, lungs, kidneys, spleen, and brain are among the first organs to suffer. The organs that are the first and most liable to be paralyzed are the kidneys and heart, the next the portal glands.

It is not sufficient to look to weekly or monthly exposures for the cause, but to daily and hourly ones. In creating either healthy or diseased habits, the either healthy or pathological acts must be *regular*, *frequent*, and *long-continued* in order to become confirmed states of health or established conditions of disease. We

must reach the underlying causes before we can cure. We may relieve and seemingly cure without knowing or removing causes; but such relieving and curing is not permanent.

We should remember that all these states and conditions we bring upon ourselves by something we are doing daily and persistently.

This wrong-doing must be stopped, then we may use with advantage any means that will help to gradually bring back and establish healthy states and habits in the diseased structures.

The Drinks, Food, Baths, Exercise, and Clothing in Diabetes Mellitus.

Drinks.—Drink one half-pint of beef-tea, made from pure lean meat fibre, free from tendon, cartilage and fat, at each meal, and the same amount between two hours after breakfast and one hour before dinner, between two hours after dinner and one hour before supper, and between two hours after supper and one hour before breakfast the next morning—making in all three pints of beef-tea in the twenty-four hours. Take no other drinks of any kind or description, unless it be a few mouthfuls of clear tea or coffee with the medicine.

Food.—Eat the muscle pulp of lean beef made into cakes and broiled. This pulp should be as free as possible from connective or glue tissue, fat, and cartilage. The 'American Chopper' answers very well for separating the connective tissue, this being driven down in front of the knife to the bottom board. In

chopping the beef, it should not be stirred up in the chopper, but the muscle pulp should be scraped off with a spoon at intervals during the chopping. At the end of the chopping, the fibrous tissue of the meat (the portion that makes up fibrous growths) all lies on the bottom board of the chopper. This may be utilized as soup-meat for healthy people. Previous to chopping, the fat, bone, tendons and fascia should all be cut away, and the clean muscle cut up in pieces an inch or two square. Steaks through the centre of the round are the richest and best for this purpose. Beef should be used from well-fatted animals that are from four to six years old. The pulp should not be pressed too firmly together before broiling, or it will taste like liver. Simply press it sufficiently so that it will hold together. Make the cakes from half an inch to an inch thick. Broil slowly and moderately well over a fire free from blaze and smoke. When cooked, put it on a hot plate, and season to taste with butter, pepper, and salt. Either Worcestershire, Halford, or Chutney sauce may be used on meats, if desired. A little celery may be eaten at each meal.

The urine should flow at the rate of three pints daily, and stand at or near a density of 1·020. This state of things should be present continuously for five or six weeks before bread and vegetable food should be ventured upon. When it is thought the right time has arrived, begin by allowing the patient one mouthful of bread at each meal. Take this bread after the meat is eaten. If after a few days the urine continues to remain at 1·020 density, or thereabouts, and flows at the rate of three pints only in twenty-four hours, increase the bread to two mouthfuls at each meal.

In this way advance gradually and cautiously, step by step, till at the end of four or five weeks the patient is taking two parts of lean meat to one of bread, toast, boiled rice, cracked wheat, or potato. Keep up this kind of diet, in the above proportions, continuously for the following six months, before fruits (except the lemon) are ventured upon. A little lemon-juice on the meats, or after meals, may be indulged in at any time during the progress of the cure. After the patient is sufficiently recovered to take, with safety, one part of bread, toast, boiled rice, cracked wheat, or potato, to two of the meat, half a pint of clear tea or coffee may be substituted for the beef-tea at each meal. During the entire treatment, all sweets, pies, greens, cakes, vinegar, pickles, sauce, preserves, puddings, soups, crackers, crullers, cheese, milk, mush, cream, fruits and vegetables, should be rigidly avoided.

Baths.—Take a soap and hot water bath twice a week, for cleanliness, after which oil all over with sweet oil and glycerine, rubbing in well. Every night or day sponge all over with hot water, in which put from half to an ounce of aqua ammonia to the quart of water; rub in well and wipe dry afterward. Every day put a teaspoonful of dilute nitro-muriatic acid in six ounces of hot water, and rub in thoroughly over the region of the liver. Keep this up till a miliary eruption appears, when stop it till eruption disappears; then resume it again till eruption again shows itself, and so on during the progress of cure.

Clothing.—Wear flannel or silk next the skin, and dress comfortably warm. On retiring, change all clothing worn during the day, so that it may be thoroughly aired for the following morning. Keep the

clothing sweet and clean by changing every other day. The bed should be thrown open on rising, and the bedding well aired during the day, and the bed not made up till it is time to retire.

EXERCISE.—Ride and walk daily in the open air as much as possible without fatigue. Four to six hours in the twenty-four should be spent in this way. If not able to walk or ride, the body and limbs should be rubbed and pounded all over for twenty minutes, morning, noon, and night, by some one who has strength to do it thoroughly.

MEALS.—The meals should be taken at regular intervals, and it is better not to sit down at a table where others are indulging in all kinds of food. Eat alone, or with those only who are on the same kind of diet. After the system gets in good running order, which is indicated by the urine flowing at the rate of from three to four pints daily, and standing at a density of from 1·020 to 1·026, the appetite becomes good, and often ravenous. Frequently in this stage of the cure, more than three meals a day are desired. This desire should be gratified by allowing the patient a nice broiled steak between breakfast and dinner, and dinner and supper. These extra meals should be taken at fixed and regular hours every day.

GENERAL REMARKS.—Avoid all anodynes and other medicinal agents that tend to get the stomach, bowels, kidneys and skin out of order. The cure is accomplished by removing the unhealthy alimentation that has culminated in the disease, and in aiding the removal of the pathological states of the deranged organs by the use of such remedial agents as assist in restoring normal healthy action.

By judiciously and persistently following out the foregoing plan of alimentation, treatment, etc., the diseased organs and system generally soon begin to take on a more and more healthy state. The urine contains every succeeding day less and less sugar, its density becomes less and less, the quantity decreases, the colour heightens, the appetite improves, the eyes become brighter and brighter, the skin loses gradually its dryness and becomes more and more soft and oily, and the mucous membrane less and less feverish and dry; the thirst ceases, and the entire organism takes on little by little, yet certainly and surely, the actual appearances, states, and conditions of health.

In less than one week's time after this treatment is thoroughly entered upon, the quantity of urine decreases from gallons to about two quarts; the density falls from 1·040 to 1·060 down to 1·026 to 1·034, varying with the advancement and severity of the disease. The thirst usually ceases in about three days, after which the sufferings of the patient are comparatively slight.

The slightest deviation in the patient from the course marked out can be detected by the watchful and expert physician at once. A single mouthful of bread, vegetables, fruit, sauce, sugar, or any fermenting, farinaceous, or saccharine food will elevate the density of the urine many degrees, by increasing the sugar in it, and the quantity voided will be much greater. The physician should be able to detect at once any departures of the patient, and call him to strict account. No one need hope to handle this disease successfully without a rigid observance of the foregoing rules and regulations.

Medicines alone will not cure the disease. They are only aids in restoring healthy states after the cause, or the unhealthy alimentation, is removed. None but careless feeders ever have this disease, unless, as in rare instances, it may be imperfectly developed by local injuries. As the desires and appetites of the patient have to be entirely ignored, the physician must endeavour to so inspire his patient that his soul and body will be in the good work. Unless he can do this, his patient will steadily yield to the awful cravings of a diseased appetite too often to permit a cure. The patient can tear down more in one minute, by indulging in the forbidden, than the physician can put up in three days. Hence, you see, the odds are with the patient in his downward course, unless the physician can inspire him with such a sense of duty and responsibility to himself that the feeling of doing right, under all circumstances, will override the cravings of diseased desires and appetites.

Diseases in organs which arise from defective or unhealthy alimentation are the result of confirmed habits in eating too exclusively and continuously food which, in the way and proportion in which it is taken, cannot be well digested ; consequently it is unfitted for assimilation. The chemical and vital changes of fermentation, decay, and cryptogamic development set in, resulting in the production of agents debilitating and poisonous to the various vital organs which they reach, by being more or less taken up by the gland-cells of the digestive apparatus.

These desires are pathological habits in the organ or organs affected, and have been brought on by such organs being continuously compelled to do and to be

exposed to labours unfitted for them to perform or endure, without becoming more or less over-taxed, enervated, deranged, paralyzed, and changed in function, and eventually in structure.

To produce these states, conditions and changes requires time and persistent and continued exposure to the before-mentioned abnormal causes and labours. To cure them also requires time and the persistent and continued avoidance of all causes producing them, and the constant and unflinching use of such food and medical means as will keep the system constantly and continuously in the most perfect running order. This is indicated by the urine flowing at the rate of about three pints daily, standing at a density of 1·020, clear, no sediment being deposited on cooling, and no sugar, albumen, or other pathological body or condition present; the bowels moving once or twice a day, and at the regular time; no pains or aches; head clear, no dizziness; skin and mucous membranes in good order; mind cheerful, and all the normal functions going on in a healthy manner.

In this disease the lobules of the liver, or that portion of the gland which is connected directly with the bloodvessels, and which organizes glycogenic matter or animal sugar, is the part that is directly involved. This portion of the liver is too active, and makes more animal sugar than is required. This excess has to be eliminated, and the kidneys have this additional work to do. Soon they, too, become over-active, and little by little become involved INDIRECTLY in the disease.

To effect a cure, we must cut off all food (as far as possible) that goes to make animal sugar. This includes vegetable food, fruits, animal fats, tendon and

connective or glue tissue and cartilage. Also all excess in drinks. This lessens the labour of the diseased parts, and little by little their excessive activity ceases, and normal states ensue, which, if persisted in for a few months, with appropriate medication, break up the diseased habit; normal conditions are restored and become permanent, and the disease is cured.

The Drinks, Food, Baths, Exercise, and Clothing in Consumption.

Drinks.—Drink from half a pint to a pint of hot water from one to two hours before each meal and on retiring, for the purpose of washing out the slimy, yeasty, and bilious stomach before eating and sleeping. Drink a cup of clear tea, coffee, or beef-tea (the latter free from fat) at each meal. During the interval, between two hours after and one hour before each meal, drink hot water or beef-tea, if thirsty.

Food Meats.—Eat the muscle pulp of lean beef made into cakes and broiled. This pulp should be as free as possible from connective or glue tissue, fat, and cartilage. The 'American Chopper' answers very well for separating the connective tissue, this being driven down in front of the knife to the bottom board. In chopping the beef, it should not be stirred up in the chopper, but the muscle pulp should be scraped off with a spoon at intervals during the chopping. At the end of the chopping, the fibrous tissue of the meat (the portion that makes up fibrous growths) all lies on the bottom of the board of the chopper. This may be utilized as soup meat for healthy people. Previous to

chopping, the fat, bone, tendons, and fascia should all be cut away, and the clean muscle cut up in pieces an inch or two square. Steaks through the centre of the round are the richest and best for this purpose. Beef should be used from well-fatted animals that are from four to six years old. The pulp should not be pressed too firmly together before broiling, or it will taste like liver. Simply press it sufficiently so that it will hold together. Make the cakes from half an inch to an inch thick. Broil slowly and moderately well over a fire free from blaze and smoke. When cooked, put it on a hot plate and season to taste with butter, pepper, and salt; also use either Worcestershire or Halford sauce, mustard and horse-radish, with lemon-juice, on meats, if desired. Celery may be moderately used as a relish.

No other meats should be allowed till the stomach becomes clean, the urine uniformly clear and free, standing at a density of from 1·015 to 1·020, and the cough and expectoration so improved that they cease to be troublesome. When this time arrives, for variety —as side-dishes—bring in broiled lamb, broiled mutton, broiled game, broiled chicken, oysters broiled or roasted in the shell, boiled codfish (fresh or salt), broiled and baked fish free from fat, and broiled dried beef, chipped thin and sprinkled over broiled beef-steak. A soft boiled egg may be taken occasionally at breakfast with the meat, if it does not heighten the colour of the urine.

Bread.—Bread, toast, boiled rice, or cracked wheat may be eaten in the proportion of one part (by bulk) to from *four to six parts* of the meat. The bread should be free from sugar, and raised with yeast. It may be made from gluten flour, white flour, or Graham flour; corn-meal preparations should be avoided.

BATHS.—Take a soap and hot water bath twice a week for cleanliness, after which oil the entire body, rubbing in well. Every night sponge the body and limbs with one quart of hot water, in which put from two to four teaspoonfuls of aqua ammonia, after which rub well and wipe dry. Every morning sponge off with a little hot water, wiping dry, and rubbing thoroughly.

CLOTHING.—Wear flannel next the skin, and dress comfortably warm. Change all clothing worn during the day on retiring, so that it may be thoroughly aired for the following morning. Keep the clothing sweet and clean by changing every other day.

EXERCISE.—Ride daily in the open air as much as possible without fatigue. If not able to ride, the body and limbs should be rubbed, kneaded and pounded all over for ten minutes, morning, noon and night, by some one who has sufficient strength to do it thoroughly.

MEALS.—Meals should be taken at regular intervals, and it is better not to sit down at a table where others are indulging in all kinds of food. Eat alone, or with those only who are on the same kind of diet. After the system gets in good running order, which is indicated by the urine flowing at the rate of from three pints to two quarts in twenty-four hours, and standing constantly at 1·020 density, the appetite becomes good, and usually more than three meals a day are desired. This desire for food should be gratified by allowing the patient a nice piece of broiled steak, with a cup of clear tea, coffee, hot water or beef-tea, midway between the breakfast and dinner, and dinner and supper.

If the directions here given are faithfully followed out and persisted in, consumption *in all its stages* becomes a curable disease.

All anodynes that get the stomach out of order are to be rigidly avoided. No medicines of any kind should be taken but such as are prescribed by a physician. The cure is accomplished by getting the system in splendid condition, when the urine becomes clear, and flows at the rate of three pints or more daily—standing at 1·020 density; the appetite becomes enormous, so that from two to four pounds of nice lean beef are eaten daily with a relish.

The chills, fevers and sweats grow lighter and lighter, and finally cease entirely; the blood-making process goes on rapidly; the bloodvessels fill out; repair of tissues begins and goes steadily on; the eyes brighten; the cough gradually grows less and less; interstitial death, decay and disintegration of lung-tissue ceases; the glow of health pervades the entire organism, and step by step the patient (if he perseveres) advances safely and surely towards health, to reach which requires only patience and the rigid observance of the rules here laid down. To accomplish this the diet and treatment are to be closely and conscientiously carried out in all their details, with the soul and body of the patient enlisted in the good cause. Of course it takes time; for nature, after all, does the work, and consequently all the changes must be physiological, and only as rapid as the human machine—when well run—can organize and repair. The physician must know precisely what to do, and do it. He must watch his patient daily, examine excretions, secretions and blood carefully, and see that

every part of the programme is faithfully and honestly carried out.

Any deviation from the right course can be detected at once by increase in fermentation, consequent biliousness, heightened colour of urine, aggravation of cough, and all the other pathological symptoms. Patients cannot deceive the skilled physician in this field of positive work. If the directions are all rigidly followed, the machine will soon get to running nicely and continue to do so until thrown off the track by departures. These departures should be detected and corrected at once, or the patient begins to lose ground. No one need hope to handle consumption successfully simply by change of climate and medicine. It is a disease arising from continued unhealthy alimentation, and must be cured by removing the cause. This cause is fermenting food, and the products of this fermentation—carbonic acid gas, alcoholic and vinegar yeast and vinegar—are the more important factors in developing the peculiar pathological symptoms, conditions and states in this generally believed incurable complaint.

Consumption of the bowels can be produced at any time in the human subject in from fifteen to thirty days, and consumption of the lungs within three months, by special, exclusive and continued feeding upon the diet that produces them.

The foregoing are a few pages from the work on *Consumption* which I have had for some time ready for publication. I have been treating this disease successfully for the past twenty years. I have simply to say that the cause and treatment of the disease are so thoroughly worked up in all their details that I

am able to produce it at will and surely cure it. This anyone can be satisfied of by watching the patients under treatment.

Drinks, Food, Exercise, Baths and Clothing in Diseases of the Digestive Organs, caused by the Alcoholic and Acid Fermentations—the Outcome of the too Exclusive and Long-continued Use of Vegetable Food, Sweets and Fruits as Aliments.

Drinks.—Drink from half a pint to a pint of hot water, one to two hours before each meal and half an hour before retiring. From fifteen to thirty minutes should be taken for drinking this water, so as not to distend the stomach to make it feel uncomfortable. The object of the hot water is to wash out a dirty, yeasty, slimy, sour stomach before eating and sleeping. The water should be drunk long enough before each meal to allow it time to leave the stomach before the food enters. When thirsty, between two hours after a meal and one hour before the next, drink hot water, clear tea or crust coffee. Take no other drinks of any kind between meals. At meals drink one cup (eight ounces) of clear tea.

Food.—Eat the muscle pulp of lean beef made into cakes and broiled. This pulp should be as free as possible from connective or glue tissue, fat and cartilage. The 'American Chopper' answers very well for separating the connective tissue; this being driven down in front of the knife to the bottom board. In chopping the beef, it should not be stirred up in the chopper, but the muscle pulp should be scraped off

with a spoon at intervals during the chopping. At the end of the chopping, the fibrous tissue of the meat (the portion that makes up fibrous growths) all lies on the bottom board of the chopper. This may be utilized as soup meat for healthy people. Previous to chopping, the fat, bone, tendons and fascia should all be cut away, and the clean muscle cut up in pieces an inch or two square. Steaks through the centre of the round are the richest and best for this purpose. Beef should be used from well-fatted animals that are from four to six years old. The pulp should not be pressed too firmly together before broiling, or it will taste like liver. Simply press it sufficiently so that it will hold together. Make the cakes from half an inch to an inch thick. Broil slowly and moderately well over a fire free from blaze and smoke. When cooked, put it on a hot plate and season to taste with butter, pepper and salt. Either Worcestershire, Halford or Chutney sauce may be used on meats, if desired. A little celery may be eaten at each meal.

Avoid all other foods and condiments. This rigid diet should be kept up till the fermentations in and the catarrhal states of the stomach and large bowels have mostly disappeared, and the thickening in these organs, caused by the increase in their connective and mucous tissues, has been removed. The increase of tissues, causing thickening in these organs and catarrh of the parts, has been produced by the long-continued fermentation of fermenting foods in these organs. After the thickenings, catarrh and fermentations have mostly disappeared, bread, toast, boiled rice and cracked wheat may be gradually brought into the diet list. Only one of these at each meal should be eaten

with the beef, the amount at first not to exceed one-tenth, BY BULK, of the meat consumed. Other meats may now be taken, such as lamb, mutton, game, fish, and whole steaks. If the fibrous growths increase again, return at once to the muscle pulp of beef, and continue it until all traces of the catarrh and thickenings have disappeared. Then begin to bring in gradually, as before, other foods, moving along watchfully and carefully, keeping the stomach clean and the urine standing at 1·015 in density, and the appetite good. It takes from one to three years' rigid work to remove these diseases thoroughly and to break up all the diseased appetites, cravings and desires that have been at the bottom of the conspiracy in producing such grave pathological states. The patient will diminish in weight, from the loss of fat and connective tissue, for the first few months. This, however, is a favourable indication, and need excite no uneasiness. After a while the gain in blood, muscle, bone and nerve will be greater than the shrinkage, when a gain in weight will take place. This gain will be slow, but it will be all the time advancing steadily in the direction towards the healthy state. The physician and patient must both be satisfied with the steady improvement, even if it is slow. It is the only way to a perfect cure and to perfect health.

MEALS.—The meals should be taken at regular intervals, and it is better to eat alone, or only with those who are living on the same diet. All temptation should, as much as possible, be removed from the patient. If three meals a day are not sufficient to satisfy hunger, the patient may be allowed a nice piece of broiled steak between breakfast and dinner,

and dinner and supper. These extra meals should be taken at fixed and regular intervals.

If care is taken in following out this plan of diet, it will not be long before the system gets in good order, the digestion and assimilation will go on nicely, and the patient will eat largely and with great relish. You will often be assured by the patient that there is no food so nice as a good cake of well-broiled muscle pulp of beef. The appetite becomes so good, and the relish for the beef is so great, that you need not be surprised to see from one to two pounds eaten at each meal. The patient should be cautioned to never eat on a tired stomach.. Rest one hour before and after each meal; eat slowly and masticate the food well.

BATHS.—Take a soap and hot water bath twice a week, for cleanliness, after which oil all over, and rub well from the head towards the feet. Every night or day sponge all over with hot water, in which put two or three teaspoonfuls of aqua ammonia to the quart of water; rub in well and wipe dry.

EXERCISE.—Ride daily as much as possible without producing fatigue. If not able to walk or ride, the body and limbs should be rubbed well from the head towards the feet, for ten to twenty minutes, morning, noon, and night, by some one who has strength to do it passively, thoroughly and well, without exciting the patient.

CLOTHING.—Wear flannel or silk next to the skin, and dress comfortably warm. On retiring, change all clothing worn during the day, so that it may be thoroughly aired for the following morning. Keep the clothing sweet and clean by changing often. The bed should be thrown open on rising, and the bedding well

aired during the day, and should not be made up till the patient wishes to retire. Good ventilation is very essential.

MEDICAL TREATMENT.—Remember that the medicines cure nothing; they only aid in keeping the machine in good running order, while the cure is effected by the careful and rigid alimentation, freed as much as possible from all paralyzing and connective-tissue forming elements. Tincture of iodine or iodoform may often be brought in advantageously for local application, while the iodides and bromides of potassium, ammonium and sodium may at times be used internally to stimulate action in the eliminating glandular organs. Good, bracing tonics may often be used before meals, to stimulate the digestive organs, and pepsine and pancreatine, taken during or after meals, may, under the proper conditions, help so far as they assist in aiding digestion and assimilation.

The great aim should be to keep all parts of the system in the best running order that is possible. The philosophy of this physiological work is to dispense with all foods, drinks, and medicines that tend in any way whatever to the getting and keeping the histological elements, organs and tissues out of order, and to persistently and continually feed and starve tissue, as long as any remnant of the disease remains; healthfully feeding those tissues that need nourishing, and starving those that have been over and unhealthfully fed.

It is not sufficient to look to weekly or monthly exposures for the cause, but to daily and hourly. In creating either healthy or diseased habits, the healthy or pathological acts must be *regular*, *frequent* and *long-continued*, in order to cause confirmed states of health

or established conditions of disease. We must reach the underlying causes before we can cure. We may relieve and seemingly cure without knowing or removing causes, but such relieving and curing are not permanent.

We should remember that all these states and conditions we bring upon ourselves by something we are doing daily and persistently.

This wrong-doing must be stopped; then we may use with advantage any means that will help to gradually bring back and establish healthy states and habits in the diseased structures.

Where patients are much reduced and digestion and assimilation poor, I endeavour to have the beef prepared as *muscle pulp*, which is beef deprived of its connective tissue. This is much easier of digestion than the whole beef, especially when it is nicely and properly prepared. If, however, the whole beef can be digested well, I have no objection to its use in all cases except in the fibrous diseases, such as tumours, locomotor ataxy, fibrous consumption, asthma and rheumatism, where enlargements of the joints have taken place. In these cases it is quite important to keep all connective tissue, as far as possible, out of the food.

One of the first things that would strike the reader, in looking over these plans, would be the similarity of the diet and treatment in the different diseases. But when we consider that fermentation and decay, in some form, in vegetable foods, sweets and fruits, are at the bottom of nearly all our chronic diseases, either as a cause or an accessory, it will be realized that the general plan of handling them will and must necessarily be quite similar in more ways than one. The close observer and follower of the plans will soon see where the nice distinctive differences in treatment come in.

In the various fibrous diseases, connective tissue and all fermenting foods have to be avoided; in *diabetes*, all foods that make sugar and all foods that ferment; in *Bright's disease*, obesity, and all fatty infiltrations and deposits in organs and tissues, all foods that make fat and all that ferment; and in *consumption*, all foods that are liable to acid yeast fermentation.

By closely studying this matter, the skilled observer will soon see the scientific character, beauty and precision of the work.

In handling a case, the success will depend upon keeping every part of the system in the best possible order. Avoid all foods that cannot be digested well, and take only those that digest the best. The stomach should be kept clean and sweet, and the urine clear and standing at about 1·015 in density; the bowels opened once daily, and all exercise and mental effort avoided that either fatigues or worries. Under this state of things, the appetite becomes good and often ravenous; blood is made faster than it is used up, and repair of tissue begins and the patient is on the road to health. Time and persevering watchfulness and care accomplish all the rest.

That the foregoing plans of treatment may carry with them corroborative testimony, I here introduce two papers by Dr. Ephraim Cutter, of New York, who has been treating disease after these methods for about nineteen years, and has had every opportunity in an extensive practice—in handling chronic diseases—to study and observe their successful workings. He is a gentleman thoroughly up, and well known in the profession as an author and skilled microscopist.

APPENDIX A.

THE THERAPEUTICAL DRINKING OF HOT WATER; ITS ORIGIN AND USE.

BY EPHRAIM CUTTER, M.D., NEW YORK.*

THE therapeutical drinking of water at a temperature of blood-heat to 150° Fahr. having become popular enough to call for an allusion to it in the London *Lancet* as a 'valuable American contribution to medicine,' and since it seems to be used at random from the directions of its distinguished introducer, I have thought that the origin and proper use of hot water should become history.

The practice dates back to 1858, when Dr. James H. Salisbury, of this city, concluded a series of experiments on feeding animals, to ascertain the relation of food as a cause and cure of disease.†

Among other things, he found that the fermentation of food and the products of these fermentations were the chief primary factors in producing the diseases which arise from unhealthy alimentation. With the idea of removing these diseases by removing their causes, he employed hot water, in order to wash out the acetic, butyric, hydro-sulphuric, lactic, and saccharic acid and sulphide of ammonium fermentation vegetations—yeasts—from the stomach and intestines.

* Published in New York in 1883.

† Besides swine, he experimented on men. These he took in companies of six healthy labourers and placed under military discipline, which he enforced himself. He also ate and drank as they did. The men were kept on single articles of food, coffee, and water. Among the articles were beans, beef, bread, chicken, crackers, fish, lobster, mutton, potatoes, oatmeal, rice, turkey. The blood, urine, and fæces of the animals were carefully examined microscopically and chemically, daily, without any preconceived idea to develop, but simply to ascertain facts and develop ideas from these facts.

In this manner he went through the whole range of foods, to show the permanent value of each when lived on exclusively and singly.

At first he tried cold water on his men to remove these products of fermentation. But cold water caused distress, pain, and colic. So he increased the temperature of the water. Lukewarm water made them sick at the stomach, and excited peristalsis upward. The temperature of the water was increased to 110° and up to 150° Fahr. This was well borne, and afforded a feeling of agreeable relief which thousands since testify to. The hot water excites normal downward peristalsis of the alimentary canal, washes down the slime, yeast, and bile through its normal channels—washes out the liver and kidneys, and the bile is eliminated through the bowels, and not through the blood *viâ* the kidneys.

It was some time before the proper times of administration and proper number of ounces of hot water, and the proper number of ounces to be drunk at meals, could be settled, in order to obtain the best results. These directions may be found published in connection with the Salisbury plans for the treatment of consumption, Bright's disease, diabetes, fibroids, sclerosis, and colloid diseases.

At the risk of repetition, for the sake of a more thorough understanding of the subject, these details will be plainly and simply given.

Directions for Using Hot Water according to the Salisbury Plans.

1. *The water must be hot; not cold or lukewarm.*—This is to excite downward peristalsis of the alimentary canal. Cold water depresses, as it uses animal heat to bring it up to the temperature of the economy, and there is a loss of nerve force in this proceeding.

Lukewarm water excites upward peristalsis or vomiting, as is well known. By hot water is meant a temperature of 110° to 150° Fahr., such as is commonly liked in the use of tea and coffee. In cases of diarrhœa the hotter the better. In cases of hemorrhages the temperature should be at a blood-

heat. Ice-water is disallowed in all cases, sick or well.

2. *Quantity of hot water at a draught.*—Dr. Salisbury first began with one half-pint of hot water, but he found it was not enough to wash out nor to bear another test, founded on the physiological fact that the urine of a healthy babe suckled by a healthy mother (the best standard of health) stands at a specific gravity varying from 1·015 to 1·020. The urine of the patient should be made to conform to this standard, and the daily use of the urinometer tells whether the patient drinks enough or too much hot water. For example, if the specific gravity of the urine stands at 1·030, more hot water should be drunk, unless there is a loss by sweating. On the other hand, should the specific gravity fall to 1·010, less hot water should be drunk. The quantity of hot water varies usually from one half to one pint or one and a half pints at one time of drinking.

The urine to be tested should be 'the urina sanguinis,' or that voided just after rising from bed in the morning before any meals or drinks are taken.

The quantity of urine voided in twenty-four hours should measure from forty-eight to sixty-four ounces. The amount will, of course, vary somewhat with the temperature of the atmosphere, exercise, sweating, etc., but the hot water must be given so as to keep the specific gravity to the infant's standard, to wit, 1·015 to 1·020. The urinometer will detect at once whether the proper amount of hot water has been drunk, no matter whether the patient is present or absent. Another test is that of odour. The urine should be devoid of the rank 'urinous' smell, so well known, but indescribable.

The Salisbury plans aim for this in all cases, and when the patients are true and faithful the aim is realized.

3. *Times of taking hot water.*—One hour to two

hours before each meal, and half an hour before retiring to bed.

At first Dr. Salisbury tried the time of one half hour before meals, but this was apt to be followed by vomiting. One hour to two hours allows the hot water time enough to get out of the stomach before the food enters or sleep comes, and thus avoids vomiting. Four times a day gives an amount of hot water sufficient to bring the urine to the right specific gravity, quantity, colour, odour, and freedom from deposit on cooling. If the patient leaves out one dose of hot water during an astronomical day, the omission will show in the increased specific gravity, as indicated by the urinometer, in the colour, etc. Should the patient be thirsty between meals, eight ounces of hot water can be taken any time between two hours after a meal, and one hour before the next meal. This is to avoid diluting the food in the stomach with water.

4. *Mode of taking the hot water.*—In drinking the hot water it should be sipped, and not drunk so fast as to distend the stomach and make it feel uncomfortable. From fifteen to twenty minutes may be consumed during the drinking of the hot water.

5. *The length of time to continue the use of hot water.*—Six (6) months is generally required to wash out the liver and intestines thoroughly.

As it promotes health, the procedure can be practised by healthy people throughout life, and the benefits of 'cleanliness inside' be enjoyed. The drag and friction on human existence, from the effects of fermentation, foulness, and indigestible food, when removed gives life a wonderful elasticity and buoyancy, somewhat like that of the babe above alluded to.

6. *Additions to hot water.*—To make it palatable, in case it is desired, and medicate the hot water, aromatic spirits of ammonia, clover tea blossoms, ginger, lemon-juice, sage, salt, and sulphate of magnesia are some-

times added. When there is intense thirst and dryness, a pinch of chloride of calcium or nitrate of potash may be added to allay thirst and leave a moistened film over the parched and dry mucous membrane surfaces. When there is diarrhœa, cinnamon, ginger, and pepper may be boiled in the water, and the quantity drunk lessened. For constipation a teaspoonful of sulphate of magnesia or one half-teaspoonful of taraxacum may be used in the hot water.

7. *Amount of liquid to be drunk at a meal.*—Not more than eight ounces. This is in order to not unduly dilute the gastric juice, or wash it out prematurely, and thus interfere with the digestive processes.

8. *The effects of drinking of hot water, as indicated, are* the improved feelings of the patient. The fæces become black with bile washed down its normal channel. This blackness of fæces lasts for more than six months, but the intolerable fetid odour of ordinary fæces is abated, and the smell approximates the odour of healthy infants suckling healthy breasts; and this shows that the ordinary nuisance of fetid fæces is due to a want of washing out and cleansing the alimentary canal from its fermenting contents. The urine is clear as champagne, free from deposit on cooling, or odour, 1·015 to 1·020 specific gravity, like infants' urine. The sweat starts freely after drinking, giving a true bath from centre of body to periphery. The skin becomes healthy in feel and looks. The digestion is correspondingly improved, and with this improvement comes a better working of the machine. All thirst and dry mucous membranes disappear in a few days, and a moist condition of the mucous membrane and skin takes place. Ice water in hot weather is not craved for, and those who have drunk ice-water freely are cured of the propensity. Inebriety has a strong foe in this use of hot water.

9. *Summary of general considerations on the therapeutical drinking of hot water:*

(*a*) Foundation for all treatment of chronic diseases.

(*b*) Excites downward peristalsis.

(*c*) Relieves spasm or colic of the bowels, by applying the relaxing influence of heat inside the alimentary canal, just as heat applied outside the abdomen relieves.

(*d*) Dilutes the ropy secretions of the whole body, and renders them less adhesive, sticky, and tenacious.

(*e*) Inside bath.

(*f*) Dissolves the abnormal crystalline substances that may be in the blood and urine.

(*g*) Necessary to have the hot water out of the stomach before meals.

(*h*) Use is to wash down the bile, slime, yeast, and waste, and have stomach fresh and clean for eating.

(*i*) Promotes elimination everywhere.

(*j*) If objection is made, it must be remembered that we are seventy-five per cent. water.

(*k*) The gas that sometimes eructates after drinking hot water is not produced by the hot water, but was present before, and the contractions of peristalsis eject it; or, sometimes it is that the air is swallowed in sipping, as horses suck air. The amount of gas contained in the alimentary canal is larger than most are aware of, and yet it is not excessive, as it takes some time to eruct a gallon of gas from the stomach. This length of time can be tested by submerging a gallon jug filled with air under water and observing how long it will be in filling with water.

(*l*) Some physicians have advised against hot water, on the ground that it would 'burn the coating off the stomach.' If this is so, then a denudation of the lining of the stomach continuously for twenty-four years is compatible with a state of otherwise perfect health, with no sign of illness for that period of time, and is also compatible with the numerous cases that have occurred

under the use of hot water as a foundation for treatment during the past twenty-five years. Again, the same physicians drink tea and coffee at the same temperature; and this act belies their warning and shows their inconsistency and want of consideration before speaking.

(*m*) These dicta about the therapeutic drinking of hot water were founded on the physiological experiments at the outset, verified in pathology and based on the experience derived from the treatment of thousands of cases since 1858. They are open, so that all who will may partake of this 'water of life freely.'

10. *Personal estimate of the Founder of this practice.* —'If I were confined to one means of medication, I would take hot water.' 'I have drunk it for twenty-five years.'

Corroboration of the writer.—The writer testifies that his own personal experience and observation corroborate the truth of these statements of the Salisbury plans.

NEW YORK,
May 30, 1883.

ORIGIN OF THE SALISBURY PLANS OF DIET IN CHRONIC DISEASES, WITH DIRECTIONS FOR PREPARING BEEF PULP.

BY EPHRAIM CUTTER, M.D.

Introduction.

The object of this paper is briefly to show the rise and progress of a new mode of alimentation, which has cured large numbers, and is beginning to command attention; to place the credit of its origin where it belongs; to point out that the order and arrangement of the principles of the system are based on extensive private and public investigations, some of them conducted under army medical officers of the United States of North America; and to prove, by references

to published and unpublished papers, that there has been an effort to make known the results of these and other investigations, for the benefit of the medical profession, so that no charge of concealment can lie against the founder of this system, and also that no one shall rob him of the honour of having made a series of observations on diet, careful, difficult, long, painful, and thorough, which are—I write advisedly—without a parallel in history, and whose results have removed some of the *opprobria medicorum* of the past.

DIET OF MAN—NORMAL.

Proportion of Animal to Vegetable Food.

1858.

In 1858 the experiments in feeding, made by Dr. James Henry Salisbury, were sufficiently advanced to determine that the *normal* proportion of animal to vegetable food in the diet of healthy people is *by bulk*—TWO-THIRDS ($\frac{2}{3}$) ANIMAL TO ONE-THIRD ($\frac{1}{3}$) VEGETABLE, or, to put it differently, ONE (1) MOUTHFUL OF FOOD FROM THE VEGETABLE KINGDOM TO TWO (2) MOUTHFULS OF FOOD FROM THE ANIMAL KINGDOM.

The writer testifies that his experience corroborates this proportion.

This was also the time that Dr. Salisbury worked out the cause of the so-called 'hog cholera,' and found it to be due to the saccharic acid yeast fermentations of starchy and sugary food eaten in excess, *i.e.*, *soured swill.*

1861.

In 1861 the war came on, and he (Dr. S.) went into the Northern army and camp hospitals in all the departments, East and West, to study

1. Measles.
2. Malaria.
3. Chronic Diarrhœa.

At Philadelphia he worked in connection with Dr. Hayes, the Arctic explorer.

1. *Measles.*—The results he attained in regard to *measles* were published in *The American Journal of Medical Sciences*, July and October, 1862. (See Appendix B.)

2. *Malaria.*—The results he attained in the study of *malaria* are published as follows:

A. *American Journal of Medical Sciences.* 1886.

B. *Revue Scientifique.* Paris. November, 1869.

C. *Scientific American Supplement.* 1883.

D. *Malaria. McNaughton Prize Essay* awarded by the Albany Medical College Alumni Association. New York. William A. Kellogg. 1885. (See Appendix C.)

3. *Diarrhœa.*—The results he attained in *camp diarrhœa* were reported to the Ohio Surgeon-General in 1863, and were published by the latter in 1864.

This report is out of print, but may be found in the United States Medical Library at Washington, D.C.

At first Dr. Salisbury had no idea of the real nature of the disease (camp diarrhœa), but, in common with others at that time, supposed it was due to malaria and to drinking bad water.

He was surprised at learning from his observations that chronic or camp diarrhœa was essentially '*consumption of the bowels*,' and the same as the so-called 'hog cholera.'

In the above report he traced it to a too exclusive use of amylaceous food, and proposed a new army ration by which chronic diarrhœa might be avoided, which, to repeat, he found in 1858 was due to the feeding too exclusively on fermenting and too acid yeast foods, to wit, starchy and sugary food in an advanced state of vinegar fermentation.

FOOD STUDIES.

Experiments at Camp Dennison made by Dr. Salisbury to show the Basis of his proposed New Army Ration.

After finishing his observations on measles, malaria, and diarrhœa in the Federal Army, at the order of the proper authorities, a ward (No. 30) at Camp Dennison, United States Army Hospital, capable of containing thirty patients, was cleared, cleaned, and put in good order.

Surgeon Palmer was put in charge, and was detailed to report to Dr. Salisbury at the end of each month. Nineteen (19) cases of chronic camp diarrhœa were placed in the ward, which cases were regarded as bad and obstinate, if not incurable.

They were all put on broiled beefsteak and coffee, with anti-fermentative medicines.

At the end of twenty-eight (28) days, Dr. Palmer reported through Dr. B. Cloak, surgeon in charge of hospital, as follows (see Ohio Surgeon-General's Report, 1864, at the Army Medical Museum, Washington, D.C., p. 77):

Dennison U.S.A. General Hospital,
Camp Dennison, Ohio,
December 20, 1863.

Dr. Salisbury,

Dear Sir,—I enclose you Dr. Palmer's report of the diarrhœa ward. The treatment is highly satisfactory. Let us hear from you.

Truly your friend, B. Cloak,
Surgeon in Charge.

Dennison U.S.A. Hospital,
December 17, 1863.

Sir,

The following is a report of those cases of camp diarrhœa examined by you (the details are omitted here). I am pleased with the use of an albuminous diet in chronic diarrhœa. It undoubtedly has had much to do with the successful treatment of the above cases. I like it far better than the farinaceous. All the cases were confirmed chronic diarrhœa. The results met my expectations. An improvement was manifest in every one of the nineteen cases; the transfer board for the invalid corps has just examined Ward 30, and taken several of the number for first and second battalion duty, so that I will be unable to report further. A few will be fit for their regiments. Hoping to hear from you soon, I remain, most respectfully, your obedient servant, Chauncy B. Palmer,
A. A. Surg. U.S.V.

Dr. Salisbury.

The meaning of this is that 'there were no deaths, and so many were cured in the ward, that the surgeon had not material enough to report on, after less than one month's diet on beef and coffee.'

Army Rations.

The United States Army authorities were so much pleased and impressed with the favourable results just given, that they asked Dr. Salisbury to get up an army ration. Hence he went to Cincinnati, and hired six (6) labouring men to board with him, living on army biscuit and coffee.

In the course of nineteen days they all had 'consumption of the bowels,' or 'chronic diarrhœa,' himself included, as he ate and lived with them, in order to see that his discipline was kept up. Each had, on an average, six to thirty stools a day. Some more, some less.

Rochelle salts were given to clear out the fermenting matter (this should not be done in old cases), and then they were boarded on beefsteak and coffee; in a very short time they were comparatively well, simply by removing causes.

After this he proceeded to the establishments for manufacturing desiccated foods, which were located in New York City, to see their processes and what arrangements could be made for the supply of an army ration. He inspected the manufactories, and reported to the Surgeon-General of the United States Army at Washington, who ordered supplies of the rations suggested by Dr. Salisbury.

Arrangements were nearly completed when Richmond fell, the war was over, and the new army ration was abandoned. At the same time Prof. Horsford, of Cambridge, was engaged on this army ration, working by himself and in his own way at Washington, but when he saw Dr. Salisbury's report he wrote, 'You

have hit the nail on the head,' gave up his researches, and went home.

Diseases first cured by Dr. Salisbury on Unchopped Beef.—1858.

Consumption of the lungs.—See unpublished work on *Consumption, its Causes and Cure.* Ready for the press in 1867. J. H. Salisbury, M.D.

Consumption of the bowels, or chronic diarrhœa, was cured on unchopped beef in 1863.

Chopped Beef.—1865.

First use of beef pulp to cure a case of disease was made in this year, 1865.

Diet card for Bright's disease was published by Dr. Salisbury in 1865.

The first case of disease cured by the chopped beef or beef pulp was one of an ovarian tumour that was removed by this diet, 1865.

See unpublished paper entitled 'Causes and Treatment of Goitre, Cretinism, Ovarian Tumours, and other Diseases.' Ready for the press in 1863. Dr. J. H. Salisbury.

Uterine Fibroids.—1865.

The next case cured by the use of the chopped beef was one of uterine fibroid.

See paper entitled 'Food as a Medicine, in Uterine Fibroids.' *American Journal of Obstetrics.* New York, 1877.

Chopping the Beef by Hand.—1867.

In 1867 the beef pulp was obtained by taking clear steak, stripping off the fat, fascia, and bone, placing it on a board, or in a chopping-tray, chopping with a dull knife-edge on one side of the steak, then with hand or spoon scraping off the pulp. Next the other side of the steak was turned up and subjected to the same process.

The scraped pulp was then moulded by the hand into cakes like fish-balls, one to one and a quarter inches thick, and about three inches in diameter; it was then broiled moderately, and while hot seasoned with black or red pepper, butter and salt, and eaten immediately.

In this preparation the white connective tissues were picked out by hand as carefully as possible. Where time is of no object and help is plenty, this hand process answers very well, and was used by Dr. Salisbury until the next improvement was realized in 1874 by the use of machines.

Chopping the Beef by Machine.

After trying many machines, the American meat-chopper, manufactured at Athol, Mass., was found in 1874 to be the most efficient, no other machine removing the connective fibrous tissues perfectly. Save the Enterprise and the Hale choppers, all others were found useless.

The first case cured by machine-chopped beef, or beef pulp, was one of fibrous consumption in 1874.

The American Meat-chopper is recommended by Dr. Salisbury in all excessive formations of fibrous tissues where they do not belong naturally; for example: sclerosis, locomotor ataxy, fibrous consumption, goitre, uterine fibroids, ovarian tumours, cancer, fibrous thickening of air passages, as in asthma, etc.

Uses of the Enterprise and Hale Choppers, which partially remove the connective fibrous tissues.—They answer nicely in consumption of the lungs, consumption of the bowels, all diseases of fatty degeneration, Bright's disease of the kidneys, Bright's disease of the lungs, fatty heart and other muscles, fatty liver and other organs, obesity, cataract, arcus senilis, apoplexy, hemiplegia, paresis, partial paralysis, dyspepsia, diabetes, nervous prostration, etc.

REMARKS.

The experiments previously alluded to showed that adult man can exist and thrive indefinitely on lean beef pulp and hot water. The stomach is purely a lean meat digesting organ. When too much food from the vegetable kingdom is eaten, the bile is sent to the stomach to digest it. It is the peculiar office of the bile to digest vegetable food. When bile is detected in the stomach, the condition is called 'biliousness,' but it is merely an effort of nature to right a physiological wrong done. The vegetable food and the fibrous connective animal tissues in excess in the stomach undergo fermentation. Carbonic acid gas, alcohol, and after a time acetic acid (vinegar) are developed by the growth of the alcoholic and vinegar yeasts feeding on the vegetable food and animal connective tissues, in the alimentary canal and stomach especially. These cause, by the action of the carbonic acid gas mainly, a paralysis of the stomach, also the formation of animal tissues in the condition of partial weakness and death, as seen, for example, in the thickening of the large intestines in chronic diarrhœa. The diarrhœa that accompanies these conditions is due to the catarrhal pouring forth of the intestinal juices, and to an effort of nature to remove the offending matter.

The eliminating glandular organs also are partially paralyzed. They do not properly organize their eliminations. They increase in size, and the thickened fibrous tissues make up much of the bulk of the enlarged viscera.

The production of the chemical agents known as alcohol and carbonic acid (carbonic di-oxide) are prime factors in the production of the paralyzed catarrhal conditions. The yeast fermentation of the food from the vegetable kingdom, and the connective fibrous animal tissues, is best avoided by removing them from the field of operation, as one would render a gun harmless by drawing the charge.

Why are the Connective Fibrous Tissues removed from the Beef Pulp?

To repeat, *First.* Because they are subject to fermentation and produce carbonic acid gas, the same as food from the vegetable kingdom does.

Second. Because fibrous tissues of animal food are special food for animal fibrous tissues.

Third. Because the pulp acts by starving out the fibrous connective glue or colloid tissues.

Fourth. Because experience shows in hundreds of cases that fibrous growths in from one to three years are removed more or less completely, and because a return to animal food, which retains the connective fibrous tissues, will be followed by the return of the diseased fibrous growths in the trespasser.

Fifth. Because the beef pulp is not subject to the acetic fermentation and the evolution of carbonic acid gas, and hence it does not cause diseases of fatty degeneration and paralysis, which the absorption of carbonic acid gas produces.

Sixth. Because the advantages of chopped defibrinated beef when broiled are:

(*a*) Its easy digestion.

(*b*) Its rapid absorption.

(*c*) Its forming all the body tissues in a healthy manner.

(*d*) Its being a speedy builder up of the blood.

(*e*) Its clearing out abnormal vegetations from the blood and urine.

(*f*) Easy to swallow.

(*g*) Usually acceptable to the palate.

(*h*) Even when administered against the appetite, it has saved life.

(*i*) It is never too heavy or too rich a food for the weakest patient, as ordinarily thought.

Seventh. When liquid foods alone can be taken, beef essences and teas should be made from beef freed from

the connective fibrous tissues, of which Johnston's beef extract is the best example known at present.

Why Broiled?

The object of cooking the beef is to render it more soluble in the stomach than the raw beef.

When the beef is *fried* it is raised to a temperature of boiling fat, about four hundred degrees (400°) Fahrenheit. This heat abstracts the water from the beef and makes it hard and dry, and hence it is more indigestible. But the chief objection to frying is that the beef is not ventilated, and there is no chance for the escape of the products of the destructive distillation at so high a temperature.

Broiling coagulates the albumen and makes the meat juicy and tender, because not subjected to so high a heat as in frying. Roasting in the open air is equivalent to broiling, which is a mode of cooking where there is ventilation; to repeat, ventilation is necessary for cooking. When cooking in closed vessels or envelopes is adopted, it is found detrimental to the quality of the result, causing the food to become sometimes purgative and irritating to the alimentary canal.

Polarized Light and Cooking.

Another effect of broiling is to cause the pulp to cease to polarize light, showing a radical physical change in the structure.

Never Broil the Meat Dry, lest it become Indigestible as in Frying.

Never Eat the Chopped Beef Raw.

Some have called the Salisbury Plans, even in the judicial court-room, 'raw beef and hot water.' But these are not the Salisbury Plans, and never were. Dr. Salisbury says he *never ordered a mouthful of raw meat*, for the following reasons:

First. Because raw meat does not digest well, and

the morphology of the fæces where raw meat has been eaten shows it to be not well digested.

Second. To avoid tape-worms, which are found in beef, as well as in pork and game. Abyssinia is said to be the country of tape-worms. Travellers report that the practice there is to drive kine to the doors of the kraals, and cut morsels of beef from the live animals in such a way as not to destroy life. The raw and quivering morsels are eaten at once, being considered as choice dainties.

APPENDIX B.

MEASLES.

Dr. Salisbury showed that measles in camps of soldiers were contracted from the vegetation of decaying wheat or rye straw on which the soldiers slept, and which had been soaked with their secretions, namely, with urine and sweat, thus *animalizing* the ordinary innocent vegetations of wheat and rye straw, which will not infect man by ordinary contact, but which, by inoculation, cause a mild, eruptive disease which protects from measles.

He reports that one hundred children, who had not had measles, were inoculated with the fungi of wheat and rye straw. The result was a mild eruptive disease, and a complete protection to them when exposed to measles afterwards for the first time. After animalization by culture on wheat and rye straw, the same fungi, without inoculation, conveyed measles.

This principle of animalization of innocent vegetations appears not to be sufficiently recognised by the many writers of the present day on germ diseases. If it was, there would be less conflict of opinion.

The profession did not receive this report, mainly because the late Dr. Woodward reported that he had cultivated the fungous vegetations on wheat and rye straw, had exposed people to them, and that the results of Dr. Salisbury were not borne out. Afterwards,

when he showed his modes of culture, it was found that the straw he used was *oat* straw. Being asked to correct his mistake, he said, after the example of another, 'What I have written, I have written.'

APPENDIX C.

MALARIA.—PRIZE ESSAY.

The committee of award remarked as follows on page 25 of the Proceedings of the ninth annual meeting of the Albany Medical College Alumni Association, March 1, 1882 (Albany: Weed, Parsons and Co.): 'The essay on malaria signed "Morphology" is a report of elaborate investigations, over a territory that covers half a continent, in the minute growths which are found in the microscopic investigations of malarial disease. It is only for a few years that the scientific world has known of growths wide in their variety as the larger forms which make up so much of the sensible world. A field is opened, beside which we stand hesitating before we enter and master its secrets. The author of this essay has made investigations in the domain of the ultimate science of the age. His researches rank with, and are comparable to, those of Klebs, Tomasi, Pasteur, Koch, Cohenheim, Ecklund, and others. These men who carry the light into the new places do not always travel by the same road. It will need the progress of a near but, as yet, future time to determine the questions of differences which arise between them, and your committee would award the "McNaughton Memorial Prize" for the best essay on malaria to this which is signed "Morphology," in the opinion that it contains the requirements for this position, to wit, thorough study of the questions involved; minute, extensive, and patient investigations of the facts within the reach of skilful effort; and well-considered vouchers therein.'

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